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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,480	04/19/2004	Cassandre Michelle Fecht	DC4998CIP1	3304

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Dow Corning Corporation
Intellectual Property Dept. - CO1232
P.O. Box 994
Midland, MI 48686-0994

EXAMINER

ROBERTS, LEZAH

ART UNIT	PAPER NUMBER
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1612

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/827,480	Applicant(s) FECHT ET AL.	
	Examiner LEZAH W. ROBERTS	Art Unit 1612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4- 7, 9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' arguments, filed January 29, 2010, have been fully considered. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims

Claim Rejections - 35 USC § 103 – Obviousness

1) Claims 1, 2, 5-7, 9 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Candau (US 6,033,648). The rejection is maintained.

Applicant's Arguments

Applicant argues the rejection is improper Applicant respectfully submits the 103 rejections in the 9/01/2009 to be improper. Applicant respectfully submits the above rejections fail to determine the scope and content of the prior art, and subsequently fails to ascertain the differences between the claimed invention and the prior art.

Applicant does not believe the present claims involve "overlapping ranges" in the same manner as In re Peterson and asserts In re Peterson was concerned with ranges of elements or components in a composition. Applicant respectfully submits the reference

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at best discloses a chemical formula that represents a genus of the present hydrocarbyl functional organopolysiloxanes. Applicant submits that the 09/01/2009 103 rejections fail to follow the guidelines established in MPEP 2144.08 for assessing obviousness of genus/sub\ genus/species relationships.

Applicant respectfully submits that in formula (II) of Candau, no less than 5000 (50 x 1000) oxyalkylene species are represented in this formula, not including possibilities or variations for the R1 end group (including these would increase the variations 3x to 15,000). Furthermore, Applicant notes the expressed teachings of Candau to "emulsifiers" and multiple oxyalkylene groups. In particular, Candau preferred structures have a minimum of 3 ethylene oxide units (t, or 1 as incorrectly shown in the structure, ranges from 3 to 100). Thus, Applicant respectfully submits that one skilled in the art, upon reading Candau, would not immediately select the presently claimed siloxanes having the defined R1 hydrocarbyl group. Therefore, considering the size of the genus, and the expressed teachings of Candau, the present claims cannot be considered prima facie obvious in view of Candau.

Examiner's Response

It is submitted that the previous office action did draw the correlation between the instant claims and the compounds and compositions of the prior art in the body of the rejection. Candau discloses a formula overlapping the formula of the instant claims. Formula II encompasses the first formula recited in the instant claims where R1 is —

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$(\text{CH}_2)_3\text{OCH}_2\text{CH}_2\text{OH}$. The R group of the reference is $-(\text{CH}_2)_s\text{O}-(\text{C}_2\text{H}_4\text{O})_t(\text{C}_3\text{H}_6\text{O})_u\text{R}^1$ where s is 1 to 5, t is 1 to 100, u is 0 to 50 and R^1 is H, CH_3 or CH_2CH_3 , which encompasses a compound with the formula $-(\text{CH}_2)_3\text{OCH}_2\text{CH}_2\text{OH}$, a compound encompassed by the instant claim. When s is 3, t is 1 and u is 0, it encompasses the claims limitation of R being $-(\text{CH}_2)_3\text{OCH}_2\text{CH}_2\text{OH}$. The R^2 group of the reference may be methyls, which is encompassed by the claims recitation that R may be an alkyl group containing 1 to 20 carbons. The x value of the instant claims corresponds to the m value of the reference. The x may range from 1 to 500, which encompasses the m of the reference ranging from 5 to 300. Thus when s is 3, t is 1, u is 0, m is 150 and R^2 is a methyl, it is encompassed by the instant claims. Furthermore, in some aspects, the compounds of the reference are narrower in scope than those of the instant claims, for example, the m value of the reference is narrower in scope than that of x but does encompass most of recited range without going outside of the claimed limits of 1 and 500. In regard to R of the instant claims, the R group of the reference corresponding to R of the instant claim may be an alkyl comprising 1 to 3 carbons or a phenyl, which is narrower in scope than that recited by the instant claims where R may be an alkyl, cycloalkyl, alkenyl, aralkyl or an aryl group containing 1-20 carbons. The reference is only wider in scope in regards to the ethylene oxide, propylene oxide group designated R^1 of the instant claims, which as stated above is encompassed by the reference's disclosure of s being 1 to 5, encompassing 3 methylene groups of the instant claims, t being 1 to 100, encompassing 1 (the ethylene group) of the instant claims and u being 0 to 50 which would exclude the group even being on the compound. Thus the reference

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encompasses the instant claims. The instant claims also encompass a large genus and do not recite a particular function for the recited compounds and thus do not exclude these compounds from being emulsifiers as disclosed by Candau.

Although In re Peterson relates to overlapping ranges in a different manner, the instant case correlates to the decision insofar as the variables of the reference and the instant claims show some overlap and thus some of the species encompassed by the formula of the reference is also encompassed by the formula of the instant claims.

Further, although Candau has preferred structures, “Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments”. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Although the reference discloses preferred compounds, the reference discloses compounds that are encompassed by the instant claims, which may also be used in the compositions disclosed by the reference. Additionally, Applicant does not appear to provide any evidence or support to show that compounds where t is equal to 1 is superior or provide an unexpected result over those compounds where t is 3 to 100.

2) Claims 1, 2, 5-7, 9, 11 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lemann et al. (US 6,541,017).

Applicant's Arguments

See Applicant's arguments above. Further, Lemann's preferred structures are described in column 3. Thus, Lemann teaches preferred oxyalkylenated silicone having at least 3 ethylene oxide units, and further specifies ratios of ethylene oxide to propylene oxide to be 42/58. Such a ratio is impossible in the presently claimed siloxanes. Furthermore, Lemann teaches a preferred molecular weight considerably higher than the hydrocarbyl structures present on the hydrocarbyl functional organopolysiloxanes. Applicant respectfully submits that one skilled in the art, upon reading Lemann, would not immediately select the presently claimed siloxanes having the defined R1 hydrocarbyl group. Therefore, considering the size of the genus, and the expressed teachings of Lemann, the present claims cannot be considered prima facie obvious in view of Lemann.

Examiner's Response

It is submitted that the previous office action did draw the correlation between the instant claims and the compounds and compositions of the prior art in the body of the rejection. Lemann et al. disclose a formula overlapping the formula of the instant claims. The formula encompasses the first formula recited in the instant claims where R1 is – $(CH_2)_3OCH_2CH_2OH$. The R groups of the reference may be – $(CH_2)_pO(C_2H_4O)_x(C_3H_6O)_yR^1$ where p is 1 to 5, x is 1 to 100, y is 0 to 50 and R¹ is H, CH₃ or CH₂CH₃, which encompasses a compound with the formula – $(CH_2)_3OCH_2CH_2OH$, a compound encompassed by the instant claim. When p is 3, x is 1

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and y is 0, it encompasses the claims limitation of R being $-(CH_2)_3OCH_2CH_2OH$. The R^2 group of the reference may be methyls, which is encompassed by the claims recitation that R may be an alkyl group containing 1 to 20 carbons. The x value of the instant claims corresponds to the m value of the reference. The x may range from 1 to 500, which overlaps with the m of the reference ranging from 5 to 300. Thus when p is 3 (which is among the preferred compounds), x (the reference) is 1, y is 0, m is 5 to 300 and R^2 is as defined by the disclosure, the compounds of the instant claims are encompassed. Furthermore, in some aspects, the compounds of the reference are narrower in scope than those of the instant claims, for example, the m value of the reference is narrower in scope than that of x but does encompass most of the recited range without going outside of the claimed limits of 1 and 500. In regard to R of the instant claims, the R^2 group of the reference corresponding to R group of the instant claims may be an alkyl comprising 1 to 3 carbons or a phenyl, which is narrower in scope than that recited by the instant claims where R may be an alkyl, cycloalkyl, alkenyl, aralkyl or an aryl group containing 1-20 carbons. The reference is only wider in scope in regards to the ethylene oxide, propylene oxide group designated R^1 of the instant claims, which as stated above is encompassed by the reference's disclosure of p being 1 to 5, encompassing 3 of the instant claims, x being 1 to 100, encompassing 1 of the instant claims and y being 0 to 50 which would exclude the group even being on the compound. Thus the reference encompasses the instant claims.

Although In re Peterson relates to overlapping ranges in a different manner, the instant case correlates to the decision insofar as the variables of the reference and the

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instant claims show some overlap and thus some of the species encompassed by the formula of the reference is also encompassed by the formula of the instant claims.

Further, although Lemann et al. has preferred structures, "Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments". In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Although the reference discloses preferred compounds, the reference discloses compounds that are encompassed by the instant claims, which may also be used in the compositions disclosed by the reference. Additionally, Applicant does not appear to provide any evidence or support to show that compounds where x is equal to 1 is superior or provide an unexpected result over those compounds where x is 3 to 100 as disclosed by Lemann et al.

Claims 1, 2, 5-7, 9, 11 and 12 are rejected.

Claims 13 and 14 are withdrawn.

No claims allowed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEZAH W. ROBERTS whose telephone number is (571)272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick F. Krass can be reached on 571-272-0580. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lezah W Roberts/
Examiner, Art Unit 1612

/Frederick Krass/
Supervisory Patent Examiner, Art Unit 1612